S
CONTROL-Sierra
INSECTS
Annual Reprot

North Fork, California
October 8, 1951

1951
ANNUAL INSECT REPORT
NORTH FORK DISTRICT
SIERRA NATIONAL FOREST

October 8, 1951
DATE

Myron J. Horn
SUBMITTED BY
DISTRICT RANGER

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CONTROL
INSECTS
Sierra

North Fork, California
October 8, 1951.

ANNUAL REPORT

NARRATIVE SECTION

Report onBControl Work - Calendar Year 1951.

I. AREAS TREATED;

The areas treated as shown on the attached map are divided into three units, a total of 15,000 acres covered.

AREA 13 (CHIQUITO AREA) 3480 acres.

1. Includes narrow strip along Mammoth Road 0400 construction job.
2. An area around lower Long Meadow - Johnson and lower Chiquito camp.
3. Little Jackass, Summit Meadow and Placer area.

AREA 11 AND SMALL AREA 12 (Rock Creek Cascadel units) 4480 acres.

I Includes area along Mammoth Road 0400 from Service Point to lower Chiquito Divide north and east of Rock Creek. Most build-up around high insect risk trees south slopes Rock Creek drainages and along Mammoth Road new construction. Most blasting damaged trees were susceptible to insect attack.

Small area of pole timber insect infected along Lion Point and Cascadel Road.

Most salvage logging done in Rock Creek unit and along Mammoth Road in Chiquito unit.

AREA # 7 (Bass Lake-Hole Rancheria) 7040 acres.

Includes area around Bass Lake including Goat Mountain and area north-west. South Fork bluffs south of Hole Ranch.

II. HISTORY

A build-up in the Chiquito and Rock Creek areas was first noted in 1948 and 1949. This build-up reached an apparent peak in 1950. The 1951 epidemic expected in Chiquito did notdevelop, except along the clearing and construction work on Mammoth Road job 0400. Approximately a 500 foot wide strip twelve miles long.

Primary insect damage was caused by two insects, Dendroctonus brevicomis (Western Pine Beetle) and Ips Confusus (California engraver). The Western Pine Beetle attacked trees along the Mammoth Road weakned by blasting and other construction. The top kill of the Ips weakned some trees so that they were suscetpible to the Western Pine Beetle. Other Ips damage occured in recently logged areas. Small saplings in groups occurred spotted over area.

Insect kill concentrations were usually in groups of 5 to 20 trees of pole stands. Except for the larger trees which were dunning class 5. Most damage occurred in the Dunning age classes 1, 3, 4, and 5.

III. ORGANIZATION OF CONTROL WORK:

Where practical, insect infected trees were logged while insects were still in trees.

In other work felling was contracted and peeling and burning treatment was done by key protection personnel.

Work started November 1950 and small crews worked until March 1951, when local loggers were hired. Felling was contracted for entire job. Peak crew reached 20 men in April.

Treatment during winter was by peeling and burning infected trees. When areas became dry in April the dead barked trees were treated by spraying. Thick bark trees were peeled and then the bark and limbs sprayed.

SUMMARY OF INSECT CONTROL

Bass Lake

Trees spotted (All P.P.)			307
Trees worked (All P.P.)			278
Sprayed			89
Burned			189
Vol. worked			176, 260 F.B.M.
Ave. D.B.H.			17.5"
Area Worked			7040 Acres
Salvage Logged - Goodwin		17,210 Bd. Ft.	
Jones & Ayers		10,820 Bd. Ft.	
Burt		6,600 Bd. Ft.	
		34,630 Bd. Ft.	(26 trees)

ROCK CREEK

Trees spotted	(S.P. 3)		518
	(P.P. 515)		69
Found to have no bugs. (Fell part of above 69)			39
Trees worked	(S.P. 3)		449
	(P.P. 446)		
Sprayed			210
Burned			239
Vol. worked			310,830 F.B.M.
Ave. D.B.H.			19.5"
Area worked			4,480 Acres
	Rock Creek	2,200 Acres	
	Hogue Ranch	2,280 Acres	
		4,480 Acres	
Salvage Logged - Assoc. Lbr. & Box Co.		163,000 BD. Ft.)	
Burt		23,230 Bd. Ft.)	124 trees.

PLACER AREA (Chiquito 3430 80 acres)

Trees spotted	116
Trees worked	116
Vol. worked	79,960 F.P.M.
Sprayed	34
Burned	82
Ave. D.B.H.	24.0"

Spotted on 0400 in Lion Point area and Cascadel, Mormon Hill Road (none worked-39).

SUMMARY OF TREES TREATED

Trees treated by species		Volumes 66 Bd. Ft.		Ave. Size D.B.H.	Total Cost	Ave. Cost Per. Tree
P.P.	S.P.	P.P.	S.P.	20.5		
829	14	555,430	11620		10,400	$12.54

SALVAGE LOGGED

COMPANY OR LOGGER	NO. TREES	VOLUME BD. FT.
Associated Lbr. and Box Co.	108	163,000
Calvert Burt	19	29,830
Goodwin Lbr. Co.	13	17,210
Jones & Ayers	7	10,820
Totals	147	220,860 BD. Ft.

REPORT ON PROPOSED WORK
1952 Calendar Year

1. Bass Lake Area; 4000 acres. (Map #7)

Bass Lake has approximately 50 new fades in dunning class 3 and 5. Trees are scattered and not practical for logging.

Recommend $500.00 for use in treating by fell, peel and burn during winter.

2. Cascadel Rock Creek Area; 2,000 acres (Map #12 and 11)

Approximately 150 pole size trees in areas not treated during last two years.

Some build-up of larger Sugar Pine and Ponderosa trees in Rock Creek area are being currently salvage logged.

Should figure $500.00 for winter treatment of poles by fall pile and burn.

3. Chiquito Area; 3,000 Acres. (Map #13)

One hundred poles trees West Chiquito, Placer, and Summit Meadow can be winter treated for $500.00.

Conclusion;

We need $1500.00 for winter treatment of approximately 250 pole size trees and 50 24" D.B.H. trees.

In addition, the insect outlook indicated that the Chiquito area along Mammoth Road (0400) construction and Placer, Summit Meadow area will require treating approximately 200, insects trees.

The Cascadel Rock Creek area will probably develop 200 insect trees not subject to salvage logging.

This will mean around 400 pole to larger insect trees for spring treatment. We estimate the cost of treatment to be around $3000.00

The winter control at Bass Lake should take care of this unit.

Our observation indicates, in general, a lowering of the insect build-up that has occurred during the past few years. However, because of our dry season I strongly recommend we request $4500.00 for winter and spring control on the North Fork District.

Observation of our winter and spring work indicated decided success.

Most new insect attacks, except Bass Lake, are showing up near small infected areas not worked before.

TABULAR SUMMARY

I. Accomplishments and expenditures

1. Calander year 1951

2. Project name; NORTH FORK DISTRICT
3. Forest SIERRA NATIONAL FOREST

(1.)	Chiquito	3480 acres
(2.)	Rock Creek Cascadel	4480 acres
(3.)	Bass Lake	7040 acres
	Total	15,000 acres

4. Duration of project; November 1950 to June 20, 1951.

5. Trees species affected; Mostly Ponderosa Pine some Sugar Jeffery Pine.

6. Insect responsible; (1.) Western Pine Beelte. (Mostly Western Pine Beetle) (Dendroctonus Brevicomis)
(21) Ips
(3.) Mountain Pine Beetle.(Dendroctonus Montisolae)
(4.) Turpentine Beetle.

7. Total acreage involved; 15000 acres (3 units)

8. Control method used; (1.) Peel and burn.
(2.) Partial peel and spray.
(3.) Fell and spray.
(4.) Salvage log.

9. Number of acres spotted; 12,000 acres.

10. Number of trees spotted; 1058

Type treatment	No.Trees	Val. Bd. Ft.
1. Peel and Burn	416	567,050
2. Spray Treat	427	"
3. Salvage log	147	220,860
Total trees treated	990	787,910

II. A.Control Expenditures - various funds:

(a.) Forest Pest Control Funds:

October 30, 1950	$2300.00
February 2, 1951	$8100.00
Total alloted	$10,400.00

(b) Contributed time and expenses:
Two men 8 pay periods each
(1.) Heron 8 periods @ $142.31 = $1138.48

B.&C. Post and pre Control survey expenses:
No records available.

12. Total control costs per tree or per acre (exclusive of any survey expenditure) and contributed time.
843 trees treated (exclusive of salvage) for $10,400.00

$\frac{10,400}{843}$ = $12.34 per tree cost.

13. PERCENT OF REDUCTION OBTAINED: 80 - 90

14. Number of man days used on project control work only-- 718 days

II. Recommend Control Project

1. Calendar year - 1952
2. Project name: NORTH FORK DISTRICT
SIERRA NATIONAL FOREST

(1)	Bass Lake	4000 Acres
(2)	Chiquito	2000 Acres
(3)	Cascadel Rock Creek	3000 Acres
	Total	9000 Acres

3. Duration of control operation: November 1951 to May 31, 1952.
4. Species affected; Ponderosa Pine, Sugar Pine and Jeffery Pine.
5. Insects responsible:
   (1) Western Pine Beetle
   (2) Mountain Pine Beetle
   (3) Ips
6. Control method recommended:
   (1) Peel and burn all small and thick bark trees.
   (2) Fell and spray thick bark trees and when burning is too costly because of dry condition.

7a. Number of trees or acres estimated in need of treatment this fall and winter.

(1)	Bass Lake	50 - 1000
(2)	Chiquito	100 - 2000
(3)	Cascadel and Rock Creek	150 - 3000

Trees in Chiquito and Cascadel area are pole size.

7b. Number of trees estimated to be treated Spring - 1952.

(1)	Bass Lake	
(2)	Chiquito	200
(3)	Cascadel and Rock Creek	200
	Total	400 trees

50 o/o small pole trees on 10,000 acres.

8. Estimated cost; (Forest pest control funds)
A. Control - 1952 F.Y.

(a)	Winter control	$1500.00
(b)	Spring control	$3000.00
	Total	$4500.00

B. & C. Pest and pre control surveys.
Do with Ranger and assistant, contributed time plus 5 days. One man from Bureau of Entomology.

9. Values at stake

A. Timber

(a) Merchantable volumes and values already killed.
(b) Merchantable volumes and values immediately threatened by insects 1 MM to 5 MM- $10,000. - $50,000.00

C. Ultimate volumes and values threatened.
20,000 MM Bd. feet - $6,000,000.

D. Annual amount cut commercially and value
20 MM $600,000.00

E. Industry dependence
5 mills - 250 direct employees.

9b. Recreation - very important.
Number visitors - over 100,000 yearly.

c. Water shed values threatened.
Very high if epidemic conditions develop.

10. Attached map of insect areas developing.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

BASS LAKE - BEASORE RECREATION AREA

SIERRA NATIONAL FOREST

CALIFORNIA REGION

Scale

1 ½ 0 1 2 3 Miles

LEGEND

- National Forest Boundary
- Adjacent National Forest Boundary
- Main motor highways
- Good motor road
- Poor motor road
- Trail
- Tourist Pasture
- Supervisor's headquarters
- District ranger station
- Guard or ranger station not permanently occupied
- Permanent lookout station
- Improved Forest Camp
- Camping Spot

T.5 S.
T.6 S.
T.7 S.
T.8 S.
R.22 E.
R.23 E.
R.24 E.

Mt. Raymond
Star Dr.
White Chief Mtn.
Iron Mtn.
Iron Lakes
Last L.
Quartz Mtn.
Chiquito L.
Mugler Meadow
Fresno Dome
Boggy Meadows
Texas Flat
Cold Springs Meadow
Chiquito L.
Sivels Mtn.
Little Shuteye Pk.
Little Shuteye Pass
Morgan Meadow
McLeod Flat
Central Camp
Big Shuteye Pk.
Shuteye Pass Ridge
Haskell Meadow
Gordon Meadow
Graham Mdw.
Bass Lake
Smiley Mtn.
Manzanita
North Fork
South Fork
Ellis Meadow
Cold Spring Meadow
Castle Peak
Lion Pt.
Source Pt.
Hookers Cove
Kinsman Flat
Summit Mdw.
Fullers Meadow
Logan Meadow
Jackass Rock
Arnold Meadow
Long Meadow
Johnson Meadows
Boggy Meadow
Forked Meadow
Graveyard Meadow
Kates
Buchenau
Gordon
McSwain Mine
Beasore
Ryan
Stocks
Grizzly Meadow
Chiquito
Jackass
Fuller Buttes
Fuller Mill
Dalton
Dalton Station
San Joaquin Bridge
Big Creek
Tunnel
Diversion Dam
Diversion Dams
Airport
Fish Camp
Rogue Ranch
Cascadel Ranch
Church Ranch
Walker Ranch
Teaford's Ranch
Sivels Ranch
Placer G.S.
Kaiser Camp
Bass Lake & S. Open Light
Wishon
Coarsegold
Graham Mtn.
Melium Ridge
Whisky Gulch
Bluffs
Rattlesnake
Gold Gulch
Arnold
Helms
Crane Valley
Mtn.
Creek
Fork
Ridge
Valley
Flat
Meadow
Meadows
Point
Cove
Dr.
Gr.
Pk.
Mill
Sand
Willow
Trout
Quartz
Chiquito
Rock
Last
Long
White Chief
Kennan
Boggy
Texas
Cold Springs
Sivels
Little Shuteye
Morgan
McLeod
Graham
Bass
Smiley
Manzanita
North
South
Ellis
Cold Spring
Castle
Lion
Source
Hookers
Kinsman
Summit
Fullers
Logan
Jackass
Arnold
Long
Johnson
Boggy
Forked
Graveyard
Kates
Buchenau
Gordon
McSwain
Beasore
Ryan
Stocks
Grizzly
Chiquito
Jackass
Fuller
Dalton
Big
Tunnel
Diversion
Airport
Fish
Rogue
Cascadel
Church
Walker
Teaford's
Sivels
Placer
Kaiser
Bass
Wishon
Coarsegold
Graham
Melium
Whisky
Bluffs
Rattlesnake
Gold
Arnold
Helms
Crane
Valley
Mtn.
Creek
Fork
Ridge

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

BASS LAKE - BEASORE RECREATION AREA

SIERRA NATIONAL FOREST

CALIFORNIA REGION

Scale

1 ½ 0 1 2 3 Miles

LEGEND

- National Forest Boundary
- Adjacent National Forest Boundary
- Main motor highways
- Good motor road
- Poor motor road
- Trail
- Tourist Pasture
- Supervisor's headquarters
- District ranger station
- Guard or ranger station not permanently occupied
- Permanent lookout station
- Improved Forest Camp
- Camping Spot

INSECT AREAS Fall 1951 and Spring 1952

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
CALIFORNIA REGION

PINERIDGE DISTRICT
SIERRA NATIONAL FOREST
1950

Scale
1 ½ 0 1 2 3 4 5 Miles

LEGEND

- National Forest Boundary
- Adjacent National Forest Boundary
- Main Motor Road
- Good Motor Road
- Poor Motor Road
- Trail
- Supervisor's Headquarters
- District Ranger Station
- Guard Station not permanently occupied
- Permanent Lookout Station
- Mine
- Improved Forest Camp
- Improved Picnic Area

REPORT FIRES TO SUPERVISOR'S HEADQUARTERS, RANGER OR GUARD STATION.

1- Bass Lake
2- Rock Creek
3- Big Creek
4- Blue Canyon

10/

LEAVE A CLEAN CAMP AND A DEAD FIRE

AGRICULTURE - FOREST SERVICE - SAN FRANCISCO

R. 18 E | R. 19 E. | R. 20 E. | R. 21 E. | R. 22 E. | R. 23 E. | R. 24 E.

T. 2 S. | T. 3 S. | T. 4 S. | T. 5 S. | T. 6 S. | T. 7 S.

U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
CALIFORNIA REGION

MARIPOSA DISTRICT
SIERRA NATIONAL FOREST
1951

Scale

1 ½ 0 1 2 3 4 5 Miles

LEGEND

- National Forest Boundary
- Adjacent National Forest Boundary
- Main Motor Road
- Good Motor Road
- Poor Motor Road
- Trail
- Tourist Pasture
- Supervisor's Headquarters
- District Ranger Station
- Guard Station not permanently occupied
- Permanent Lookout Station
- Mine
- Improved Forest Camp
- Improved Picnic Area
- Camp Site

REPORT FIRES TO SUPERVISOR'S HEADQUARTERS, RANGER OR GUARD STATION

LEAVE A CLEAN CAMP AND A DEAD FIRE

1-Lewis Creek
2 Signal Peak
3- Chiquito

AGRICULTURE - FOREST SERVICE - SAN FRANCISCO